



Ted Wynne Engineering/Contractor, Inc.

417 WELSHWOOD DRIVE • SUITE 114 • NASHVILLE, TN 37211
PHONE: 615-331-7660 • FAX: 615-333-0764

December 20, 1999

Mr. Bill Stalker
Tennessee Valley Authority
P.O. Box 292409, Bldg 1, Suite 300
565 Marriott Drive
Nashville, Tennessee 37229-2409

Re: Nashville State Technical Institute in Cookeville hole test
Cookeville, Tennessee

This office performed a thermal conductivity test on one (1) 200 feet deep, 6 inch diameter vertical bore, backfilled with drilled tailings, December 1, 1999. The following data was derived from test data:

Thermal Conductivity	1.80 BTU/HR-F
Ground Temperature	59.0 F

We feel that based on our observation of the terrain, the above is representative of the area where a field of Vertical Heat Exchangers will be located for this project.

The driller's logs are enclosed herewith. According to the Driller's Log submitted to our office the bore hole penetrated more than one water source, thus our office recommends that any future holes drilled should be Grouted to prevent transfer of water from one elevation to another.

Please let us know if any additional information is needed.

Sincerely,

TED WYNNE ENGINEERING CONTRACTORS, INC.

Ted Wynne
Ted Wynne, P.E.

jh



WORK ORDER

Phone: (615) 444-0423 • Fax: (615) 444-0427

01009

Date 11-18-99

Phone

County

Yield 3-5 GPM Water Zones 152 Quality Water No Test

DEPTH	FORMATION
0-20	Red Clay
20-34	Sandy Mud wet
34-41	Broken wet
41-50	Gray lime
50-75	" "
75-100	" "
100-125	" "
125-150	152 Sulfur Strong Black
150-175	" "
175-200	" "
200 TD	

WORK ORDER

Phone: (615) 444-0423 • Fax: (615) 444-0427

01010

Date 11-14-99

Yield 25-30 GPM Water Zones 60-75 / 140 Quality Water [illegible]